In re WILLIAMS ET AL., Application No. 09/894,199
Amendment D

Amendments to the Claims:

The listing of clams will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method comprising:

receiving a start flow control signal;

receiving a stop flow control signal;

determining a quantitative time duration between said receipt of the start flow control signal and said receipt of the stop flow control signal;

comparing said quantitative time duration to a predetermined threshold to produce a comparison result; and

determining an initial rate based at least in part on said quantitative time duration and the comparison result.

Claim 2 (canceled)

Claim 3 (currently amended): The method of claim 2 claim 47, wherein said adjusting the initial rate includes increasing the initial rate if said quantitative time duration was less than the predetermined threshold.

Claim 4 (currently amended): The method of claim 2 claim 47, wherein said adjusting the initial rate includes decreasing the initial rate if said quantitative time duration was greater than the predetermined threshold.

Claim 5 (previously presented): The method of claim 1, further comprising: setting a current rate to the initial rate; and increasing the current rate.

2

In re WILLIAMS ET AL., Application No. 09/894,199
Amendment D

Claim 6 (previously presented): The method of claim 5, wherein said increasing the current rate includes doubling a value of the current rate.

Claim 7 (previously presented): The method of claim 6, further comprising: comparing the current rate to a maximum rate, and setting the current rate to the maximum rate.

Claim 8 (original): The method of claim 5, further comprising generating a set of tokens based on the value of the current rate.

Claim 9 (canceled)

Claim 10 (currently amended): A method comprising:
receiving a start flow control signal;
receiving a stop flow control signal;
determining a ~~timing~~ time difference between the receipt of the start flow control signal and the stop flow control signal; and
exponentially decreasing an initial rate if the time difference is greater ~~than the~~ than a predetermined threshold.

Claim 11 (currently amended): The method of claim 10, further comprising multiplicatively increasing the initial rate if the time difference is less than a predetermined threshold.

Claim 12 (original): The method of claim 11, wherein said multiplicatively increasing the initial rate includes doubling the initial rate.

Claim 13 (original): The method of claim 10, wherein said exponentially decreasing the initial rate includes raising the initial rate to a one-half power.

3

In re WILLIAMS ET AL., Application No. 09/894,199
Amendment D

Claim 14 (original): The method of claim 10, further comprising multiplicatively increasing a current traffic rate.

Claims 15-17 canceled

Claim 18 (currently amended): An apparatus configured to adaptively control rates, the apparatus comprising:

a rate controller; and

a timing mechanism;

wherein the rate controller is configured to receive a start flow control signal and a stop flow control signal, to determine a quantitative time duration between said receipt of the start flow control signal and said receipt of the stop flow control signal, to compare said quantitative time duration to a predetermined threshold to produce a comparison result, and to determine an initial rate based at least in part on said quantitative time duration and the comparison result.

Claim 19 (canceled)

Claim 20 (currently amended): The apparatus of claim 19 claim 50, wherein said adjusting of the initial rate includes increasing the initial rate if said quantitative time duration was less than the predetermined threshold.

Claim 21 (currently amended): The apparatus of claim 19 claim 50, wherein said adjusting of the initial rate includes decreasing the initial rate if said quantitative time duration was greater than the predetermined threshold.

Claim 22 (previously presented): The apparatus of claim 18, wherein the rate controller is configured to set a current rate to the initial rate, and to increase the current rate.

4

In re WILLIAMS ET AL., Application No. 09/894,199
Amendment D

Claim 23 (previously presented): The apparatus of claim 22, wherein said increasing of the current rate includes doubling a value of the current rate.

Claim 24 (previously presented): The apparatus of claim 23, wherein the rate controller is configured to compare the current rate to a maximum rate, and is configured to set the current rate to the maximum rate.

Claim 25 (previously presented): The apparatus of claim 22, wherein the rate controller is configured to generate a set of tokens based on the value of the current rate.

Claim 26 (currently amended): An apparatus comprising:

means for receiving a start flow control and a stop flow control signal;

means for determining a quantitative time duration between the start flow control signal and the stop flow control signal; ~~and~~

means for determining an initial rate based at least in part on said quantitative time duration<u>;</u>

<u>means for comparing the timing difference to a predetermined threshold to produce a comparison result; and</u>

<u>means for adjusting the initial rate based at least in part on the comparison result.</u>

Claim 27 (canceled)

Claim 28 (currently amended): The apparatus of ~~claim 27~~ <u>claim 26</u>, wherein said means for adjusting the initial rate includes means for increasing the initial rate if said quantitative time duration was less than the predetermined threshold.

Claim 29 (currently amended): The apparatus of ~~claim 27~~ <u>claim 26</u>, wherein said means for adjusting the initial rate includes means for decreasing the initial rate if said quantitative time duration was greater than the predetermined threshold.

In re WILLIAMS ET AL., Application No. 09/894,199
Amendment D

Claim 30 (original): The apparatus of claim 26, comprising means for setting a current rate to the initial rate; and means for increasing the current rate.

Claim 31 (previously presented): The apparatus of claim 30, wherein said means for increasing the current rate includes means for doubling a value of the current rate.

Claim 32 (original): The apparatus of claim 31, comprising means for comparing the current rate to a maximum rate, and means for setting the current rate to the maximum rate.

Claim 33 (original): The apparatus of claim 30, comprising means for generating a set of tokens based on the value of the current rate.

Claim 34 (currently amended): One or more computer-readable media tangibly embodying computer-executable instructions for performing operations, said operations comprising:

identifying a quantitative time duration between a start flow control signal and a stop flow control signal; and

determining an initial rate for sending information based at least in part on said quantitative time duration;

comparing the timing difference to a predetermined threshold to produce a comparison result; and

adjusting the initial rate based at least in part on the comparison result..

Claim 35 (canceled)

Claim 36 (currently amended): The computer-readable media of claim 35 claim 34, wherein said adjusting the initial rate includes increasing the initial rate if said quantitative time duration was less than the predetermined threshold.

6

In re WILLIAMS ET AL., Application No. 09/894,199
Amendment D

Claim 37 (currently amended): The computer-readable media of ~~claim 35~~ claim 34, wherein said adjusting the initial rate includes decreasing the initial rate if said quantitative time duration was greater than the predetermined threshold.

Claim 38 (previously presented): The computer-readable media of claim 34, wherein said operations further comprise: setting a current rate to the initial rate; and increasing the current rate.

Claim 39 (previously presented): The computer-readable media of claim 38, wherein said increasing the current rate includes doubling a value of the current rate.

Claim 40 (previously presented): The computer-readable media of claim 39, wherein said operations further comprise: comparing the current rate to a maximum rate, and setting the current rate to the maximum rate.

Claim 41 (previously presented): The computer-readable media of claim 38, wherein said operations further comprise generating a set of tokens based on the value of the current rate.

Claim 42 (currently amended): One or more computer-readable media tangibly embodying computer-executable instructions for performing operations, said operations comprising:
identifying a ~~timing~~ time difference between a start flow control signal and a stop flow control signal; and
exponentially decreasing an initial rate if the time difference is greater ~~than the~~ than a predetermined threshold.

7

In re WILLIAMS ET AL., Application No. 09/894,199
Amendment D

Claim 43 (currently amended): The computer-readable media of claim 42, wherein said operations further comprise multiplicatively increasing the initial rate if the time difference is less than a predetermined threshold.

Claim 44 (previously presented): The computer-readable media of claim 43, wherein said multiplicatively increasing the initial rate includes doubling the initial rate.

Claim 45 (previously presented): The computer-readable media of claim 42, wherein said exponentially decreasing the initial rate includes raising the initial rate to a one-half power.

Claim 46 (previously presented): The computer-readable media of claim 42, wherein said operations further comprise multiplicatively increasing a current traffic rate.

Claim 47 (previously presented): A method comprising:

determining a timing difference between a start flow control signal and a stop flow control signal;

determining an initial rate based at least in part on the determined timing difference; and

adjusting the initial rate based at least in part on the result of comparing the timing difference to a predetermined threshold.

Claim 48 (previously presented): The method of claim 47, wherein said adjusting the initial rate includes increasing the initial rate if the timing difference was less than the predetermined threshold.

Claim 49 (previously presented): The method of claim 47, wherein said adjusting the initial rate includes decreasing the initial rate if the timing difference was greater than the predetermined threshold.

8

In re WILLIAMS ET AL., Application No. 09/894,199
Amendment D

Claim 50 (currently amended): An apparatus comprising:

a rate controller; and

a timing mechanism;

wherein the rate controller is configured to determine a timing difference ~~between the~~

between a start flow control signal and a stop flow control signal to determine an initial rate

based at least in part on the determined timing difference, and to adjust the initial rate based at

least in part on a comparison of the timing difference to a predetermined threshold.

Claim 51 (previously presented): The apparatus of claim 50, wherein said adjusting the

initial rate includes increasing the initial rate if the timing difference was less than the

predetermined threshold.

Claim 52 (previously presented): The apparatus of claim 50, wherein said adjusting the

initial rate includes decreasing the initial rate if the timing difference was greater than the

predetermined threshold.

Claim 53-54 (canceled)

Claim 55 (currently amended): The method of claim 10, wherein the ~~timing~~

time difference is a measured time duration.

Claim 56 (currently amended): The method of claim 10, wherein the ~~timing~~

time difference is determined based on said receipt of the start flow control signal followed in

time by said receipt of the stop flow control signal.

Claim 57 (currently amended): The computer-readable media of claim 42, wherein the

~~timing~~ time difference is a measured time duration.

9

In re WILLIAMS ET AL., Application No. 09/894,199
Amendment D

Claim 58 (previously presented): The method of claim 1, wherein the quantitative time duration corresponds to an amount of time from said receipt of the start flow control signal until said receipt of the stop flow control signal.

Claim 59 (previously presented): The apparatus of claim 18, wherein the quantitative time duration corresponds to an amount of time from said receipt of the start flow control signal until said receipt of the stop flow control signal.

Claim 60 (previously presented): The apparatus of claim 26, wherein the quantitative time duration corresponds to an amount of time from said receipt of the start flow control signal until said receipt of the stop flow control signal.

Claim 61 (previously presented): The computer-readable media of claim 34, wherein the quantitative time duration corresponds to an amount of time from said receipt of the start flow control signal until said receipt of the stop flow control signal.